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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 09/941,416 | 08/28/2001 | Ann M. Smith | H0002295 (4960) | 7207 |
| 34284 | 7590 | 10/06/2003 | EXAMINER | |
| ROBERT D. FISH; RUTAN & TUCKER, LLP P.O. BOX 1950 611 ANTON BLVD., 14TH FLOOR COSTA MESA, CA 92628-1950 | | | ROSENBERGER, RICHARD A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2877 | |

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/941,416 | SMITH, ANN M. |
| Examiner | Art Unit | |
| Richard A Rosenberger | 2877 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 (filed as 1-9, 11-13) is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) Claim(s) ____ is/are allowed.

6) Claim(s) 1-12 is/are rejected.

7) Claim(s) ____ is/are objected to.

8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. ____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____. |

1. The application was filed with incorrectly numbered claims; there was presented no claims 10; the last claim on page 7 is claim 9 and the first claim on page 8 is claim 11. Claims 11 –13 have been renumbered as claims 10-12 to present the claims in proper numerical sequence.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 (filed as claims 1-9 and 11-13) are rejected under 35 U.S.C. 103(a) as being unpatentable over Belk et al (US 6,064,429) in view of the acknowledged prior art of the instant specification and Cornuejols (US 5,990,468).

Belk shows a camera-based optical system with a light source (laser 44) adapted to illuminate a portion of the item being inspected such that the illuminated portion identifies the location of the damaged portion and is visible form outside the automated optical system to the naked eye of an observer; see column 7, lines 33-44:

It is also anticipated that the removal of detected foreign objects could be expedited by integrating the foreign object video detection and warning system with an intense, narrowly-focused directional light, such as an eye-safe laser 44 with a frequency in the visual spectrum. The color image processing system 47 could provide the coordinates of the detected foreign object 42 to the laser 44 which is thereafter

oriented so as to emit a laser beam directed to the coordinate at which the foreign object is located upon the work table, such as by pointing at the center of the foreign object, defining the outline of the foreign object, or illuminating the entire foreign object.

It would have been obvious to use such a laser pointer system to show the location of defects in other similar camera-based defect detection systems in which the defect is marked by the operator for later removal or other processing; such marking and later removal or other processing of defects is known in the art, see the instant specification, page 2, lines 3-7. Cornuejols teaches that it is known in the art to mark defects in a manner which indicates the type of defect being marked (column 6, lines 24-31: "These marks ... may have differences, for example of colour, in order to indicate different types of defect ... or even different origins of defects.") The use of such defect-type encoding marks would have been obvious in any defect marking system in which there are different types of defects. As the type of defect determines the appropriate action that should be taken in response to the defect, marking the type of defect also necessarily marks the type of action to be taken.

Belk et al shows, in figure 11, both indicating the location of the defect with laser 44 and a warning display (49) showing an image for the camera. As the defect is in the field of view of the camera 41 and is marked by laser 44, the laser necessarily "provides a visual indication of the location of an area which is currently within the field of view of the camera" (instant claim 12, filed as claim 13).

4. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (703) 308-4804.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger
26 September 2003

Richard A. Rosenberger
Primary Examiner